



# National Weather Service

## Storm Data and Unusual Weather Phenomena



December 1997

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Killed	Number of Persons Injured	Estimated Damage Property	Crops	Character of Storm
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### CONNECTICUT, Northeast

**CTZ002>004**      **Hartford - Tolland - Windham**  
**02**      **0200EST**      **0**      **0**      **Strong Winds**  
**2200EST**

A strong storm system that was nearly stationary just to the east of Nova Scotia combined with high pressure building in from the west to cause strong northwest winds across northern Connecticut. Wind gusts to 30 to 40 mph were reported.

**CTZ002>003**      **Hartford - Tolland**  
**10**      **1500EST**      **0**      **0**      **Heavy Snow**  
**2300EST**

A secondary low pressure system moving northeastward into the Atlantic Ocean from the mid-Atlantic coast caused an area of snow to spread across the state. Several inches fell across much of the state and heavy snowfall was reported from Hartford and Tolland Counties. Seven inches fell in the Unionville section of Farmington, with 6 inches in Glastonbury and Southington. There were no reports of any particular problems with this storm.

**CTZ002>004**      **Hartford - Tolland - Windham**  
**14**      **1100EST**      **0**      **0**      **Strong Winds**  
**1700EST**

Strong northwest winds accompanied the arrival of an Arctic airmass. Wind gusts to 40 to 50 mph were reported across northern Connecticut. A peak gust to 47 mph was recorded at Bradley International Airport in Windsor Locks.

**CTZ003>004**      **Tolland - Windham**  
**23**      **0900EST**      **0**      **0**      **Heavy Snow**  
**1500EST**

A low pressure system developing off the Delaware coast moved to the northeast and rapidly intensified as it passed just southeast of Cape Cod. This storm brought a surprise snowfall to northern Connecticut. Two people died in plowing accidents. In South Windsor, a woman was struck and killed by a plow in a parking lot. In Enfield, a man was killed while operating a snowplow on a tractor after being struck by a pickup truck. Several places in northern Tolland and Windham Counties had over 6 inches, while most of Hartford, Tolland, and Windham Counties had 2 to 5 inches of snow. The maximum totals reported included: Union, 7.0 inches and West Thompson, 6.2 inches.

### MASSACHUSETTS, Central and East

**MAZ004>024**      **Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket**  
**02**      **0200EST**      **0**      **0**      **Strong Winds**  
**2200EST**

**MAZ016**      **Eastern Norfolk**  
**02**      **0412EST**      **0**      **0**      **High Wind (G51)**

A strong storm system that was nearly stationary just east of Nova Scotia combined with high pressure building in from the west to cause strong northwest winds across central and eastern Massachusetts. A peak gust to 59 mph was recorded atop Blue Hill in Milton, while most places had winds gusting to 35 to 45 mph.

**MAZ002>024**      **Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket**  
**14**      **1100EST**      **0**      **0**      **Strong Winds**  
**1800EST**



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### MASSACHUSETTS, Central and East

**MAZ004>007-012>019**      **Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth**

<b>14</b>	<b>1200EST</b>			<b>0</b>	<b>0</b>				<b>Snow Squalls</b>
	<b>1330EST</b>								

**MAZ016**      **Eastern Norfolk**

<b>14</b>	<b>1217EST</b>			<b>0</b>	<b>0</b>				<b>High Wind (G54)</b>
	<b>1300EST</b>								

Strong northwest winds accompanied the arrival of an Arctic airmass. Blinding snow squalls produced white-out conditions for a short time in many places in central and eastern Massachusetts. Thunder-snow was reported at both Hopkinton and Natick. Snow accumulations generally were less than a half inch. High winds occurred in Milton atop Blue Hill, where the Observatory recorded a peak gust to 62 mph and zero visibility in a snow squall. A few other places reporting near zero visibility in the snow included Marblehead, Westwood, Lexington, and Hopkinton. Westfield, in the Connecticut Valley, reported a peak gust to 56 mph. Other peak wind gusts included: Lawrence, 54 mph; Boston, 52 mph; Goshen, 50 mph; Falmouth, Nantucket, and Lexington, 49 mph.

**MAZ002>017**      **Western Franklin - Eastern Franklin - Northern Worcester - Western Middlesex - Western Essex - Eastern Essex - Western Hampshire - Western Hampden - Eastern Hampshire - Eastern Hampden - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol**

<b>23</b>	<b>0900EST</b>			<b>0</b>	<b>0</b>				<b>Heavy Snow</b>
	<b>1500EST</b>								

A low pressure system developing off the Delaware coast brought over a foot of heavy snow over a large area, including western and central Massachusetts and much of Norfolk, Middlesex, and Essex Counties in the eastern part of the state. A portion of northern Worcester County and northern Middlesex County received nearly 2 feet of snow! Parts of Bristol and Suffolk Counties received 6 to 8 inches of snow.

The heavy snowfall caught everyone by surprise and was also a surprise to weather forecasters. The low pressure system slowed its forward movement and intensified more than expected. What was very unusual was the extreme intensity of the snowfall, with phenomenal hourly snowfall totals reported by many observers during the morning between 9:30 AM and about Noon. A total of 8 inches fell during one hour in Ayer while 6 inches fell during an hour in both Chelmsford and Shrewsbury. Maximum storm totals occurred in northern Middlesex County, where Dracut had 23.5 inches. Other totals from that area included: Pepperell, 22.0 inches; Ayer and Townsend, 21.0 inches; and Chelmsford, 20.4 inches. In Essex County, totals ranged from 14.5 inches in Methuen to 8 inches in Gloucester and Newburyport. In Worcester County, some totals included: Clinton, 19 inches; Worcester Airport, 18 inches; Shrewsbury, 16.8 inches; Northbridge, 14.0 inches; Ashburnham, 13.5 inches; and Barre Falls, 9.0 inches. Maximum totals in Franklin County included 8 inches in Charlemont and Greenfield. In Hampden County, the maximum was 13.0 inches in East Brimfield. In Hampshire County, Amherst had 16.0 inches. Maximum totals in Norfolk County included 11.1 inches atop Blue Hill in Milton and 10 inches in Bellingham.

Hundreds of autos and trucks became stuck on hilly sections of Route 495 and Route 9. More than 20,000 electric customers lost power at one time or another in Burlington, Waltham, Woburn, Somerville, Newton, and surrounding towns as heavy, wet snow brought down numerous tree limbs. About 3,400 electric customers lost power in the Merrimack Valley. Most power was restored by the end of the day. Holiday travelers were stranded at Logan International Airport in Boston, where the storm total reached 6.8 inches.



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### MASSACHUSETTS, Central and East

**MAZ005>007-012>024**      **Western Middlesex - Western Essex - Eastern Essex - Southern Worcester - Western Norfolk - Southeast Middlesex - Suffolk - Eastern Norfolk - Northern Bristol - Western Plymouth - Eastern Plymouth - Southern Bristol - Southern Plymouth - Barnstable - Dukes - Nantucket**

29	1900EST	0	0	5.0K	Strong Winds
30	1500EST				

**MAZ016-020-022>023**      **Eastern Norfolk - Southern Bristol - Barnstable - Dukes**

30	0900EST	0	0		High Wind (G59)
	1230EST				

An intense low pressure system passed to the west of New England, moving north through the Hudson Valley in New York State. This storm produced strong southeast to south-southwest winds across the region and near-record low barometric pressure for the month of December. The lowest readings were around 28.80 inches.

There were several reports of high winds, with a gust to 68 mph recorded at the hurricane barrier in New Bedford and a peak gust to 62 mph recorded on Martha's Vineyard. On Cape Cod, at Chatham, wind gusts were estimated up to 65 mph at the fish pier. A gust to 55 mph was reported from Pocasset near Buzzards Bay. The Blue Hill Observatory in Milton recorded several wind gusts to 58 mph. Trees and wires were reported down in South Dartmouth and sheet metal was reported flying off a building on Pope's Island off Fairhaven. In Cambridge, a street was blocked by debris falling from buildings.

Minor coastal flooding occurred in the New Bedford area. On West Island, about 8 backyards had 1 to 1.5 feet of water in them. There also was a report of 6 to 12 inches of water on a coastal road in South Dartmouth.

### NEW HAMPSHIRE, Southern

**NHZ011>012**      **Cheshire - Hillsborough**

02	0200EST	0	0		Strong Winds
	2200EST				

A strong storm system that was nearly stationary just to the east of Nova Scotia combined with high pressure building in from the west to cause strong northwest winds across Cheshire and Hillsborough Counties. Wind gusts to 40 to 50 mph were reported with isolated power outages.

**NHZ011**      **Cheshire**

14	1200EST	0	0		Snow Squalls
	1230EST				

**NHZ011>012**      **Cheshire - Hillsborough**

14	1200EST	0	0	Strong Winds	
	1900EST				

Strong northwest winds accompanied the arrival of an Arctic airmass. Wind gusts to 35 to 45 mph were reported across Cheshire and Hillsborough Counties. Snow squalls caused white-out conditions in both Rindge and Jaffrey around 12:15 PM.

**NHZ011>012**      **Cheshire - Hillsborough**

23	1000EST	0	0	Heavy Snow	
	1600EST				

A low pressure system developing off the Delaware coast moved to the northeast, passing southeast of Cape Cod, and dumped over a foot of heavy snow to parts of southern New Hampshire. The storm system intensified rapidly and the heavy snow was a surprise to everyone, including weather forecasters. Snow fell at rates of several inches per hour in much of the area.

The heavy snow caused traffic problems throughout the region. In Nashua, where four tractor-trailer trucks jackknifed, the Everett Turnpike was closed. State police reported that many cars skidded off Route 89 and Route 93. There were no serious injuries reported. Many people left work during the early afternoon but became stranded for hours in traffic jams while making the commute home. School children also were delayed getting home for hours when their buses became stuck or caught in the traffic jams. Some children did not arrive home until the early evening. Some snowfall totals in Hillsborough County included: Nashua, 20.5 inches; Amherst, 17.5 inches; Bedford, 14 inches; Manchester, 13.7 inches; and Hollis, 10 inches. In Cheshire County, Jaffrey



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		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Persons Injured	Property Damage	Crops	

### NEW HAMPSHIRE, Southern

reported 10.5 inches and Rindge, 9.5 inches.

### RHODE ISLAND

RIZ001>007

Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport

02 0200EST 0 0 Strong Winds  
2200EST

A strong storm system that was nearly stationary just east of Nova Scotia combined with high pressure building in from the west to cause strong northwest winds across the state. Wind gusts to 40 to 50 mph were reported.

RIZ001>007

Northwest Providence - Southeast Providence - Western Kent - Eastern Kent - Bristol - Washington - Newport

14 1100EST 0 0 Strong Winds  
1700EST

Strong northwest winds accompanied the arrival of an Arctic airmass. Wind gusts to 40 to 55 mph were reported across most of Rhode Island. A peak gust to 51 mph was recorded at Tiverton while a peak gust to 45 mph occurred at Providence

RIZ001

Northwest Providence

23 0900EST 0 0 Heavy Snow  
1500EST

A low pressure system developing off the Delaware coast moved to the northeast and intensified rapidly, passing southeast of Cape Cod. This storm brought a surprise heavy snowfall to northern Rhode Island. Heavy snowfall was a surprise to everyone including weather forecasters. Despite some slick driving and early school dismissals, there was little disruption to many local communities. However, in the Woonsocket-Cumberland area there were dozens of auto accidents.

The maximum snowfall total was 14 inches at Burrillville in the northwest corner of the state. Other totals included: Cumberland, 7.8 inches; Woonsocket, 7.5 inches; and North Foster, 6 inches. The rest of the state had 1 to 4 inches, except less than an inch fell along the coast.

RIZ006>007

Washington - Newport

29 1900EST 0 0 Strong Winds  
30 1500EST

An intense low pressure system passed to the west of New England, moving north through the Hudson Valley in New York state. This storm produced strong southeast to south-southwest winds across most of the state and near-record low barometric pressure for the month of December. The lowest pressure readings were around 28.90 inches. Wind gusts generally were in the range of 40 to 55 mph along the south coast. A couple of wind gusts reported included: Newport, 52 mph (with sustained winds in the 30 to 40 mph range) and Warwick, 43 mph. The strong onshore winds resulted in minor coastal flooding, with the tide running 3.4 feet above normal at the Fox Point Hurricane Barrier in Providence.